

**Please delete the present Abstract of the Disclosure.**

**Please add the following new Abstract of the Disclosure:**

A method of producing an optical imaging system having a plurality of optical elements after the imaging system is initially assembled and adjusted. During a subsequent measurement of the imaging system, the wavefront errors in the exit pupil, or an area conjugate therewith, belonging to the imaging system are determined in a spatially resolving manner. The optical element which has the correction surface is held in a separate mount and, following the measurement, is removed together with the mount. On the basis of the measurement, a topography and/or refractive index distribution of the correction surface which is required to compensate for the wavefront errors determined during the measurement is calculated. Following subsequent coating of the correction surface in the mount, the processed optical element is installed again in its installed position in the imaging system.